

October 22, 2004 RC-04-0170

Document Control Desk U. S. Nuclear Regulatory Commission Washington, DC 20555

Attention: Ms. K. R. Cotton

Ladies and Gentlemen:

Subject:

VIRGIL C. SUMMER NUCLEAR STATION

DOCKET NO. 50/395

OPERATING LICENSE NO. NPF-12

REACTOR VESSEL RADIATION SURVEILLANCE PROGRAM

Please find enclosed WCAP-16298-NP, Revision 0, "Analysis of Capsule Z from the South Carolina Electric & Gas Company V. C. Summer Reactor Vessel Radiation Surveillance Program" as required by 10CFR50 Appendix H Part IV. A. This technical report reflects the results of the tests performed on Capsule Z that was withdrawn from the reactor vessel during the 14th refueling outage at the V. C. Summer Nuclear Station (VCSNS). These tests are in accordance with the requirements of 10CFR50 Appendix H, Part IV. B. Additionally, per the requirements of 10CFR50 Appendix G, this WCAP contains the results that indicate that upper shelf energy greater than 50 ft-lbs is expected throughout the life of the vessel for all beltline materials.

Also enclosed is WCAP-16306-NP, Revision 0, "Evaluation of Pressurized Thermal Shock for V. C. Summer". This report was prepared to determine the RT_{PTS} values for the VCSNS reactor vessel beltline based on the results of the Capsule Z evaluation. The conclusion of the report is that the beltline material in the VCSNS reactor vessel has end of life (EOL) RT_{PTS} values below the screening criteria values of 270°F for plates, forgings and longitudinal welds and below 300°F for circumferential welds at 56 EFPYs.

Based on the results of the testing, a change to the VCSNS Technical Specification heatup and cooldown curves, Figures 3.4-2 and 3.4-3, will be required. A Technical Specification change request will be submitted to the NRC to update these figures by June 30, 2005. As an interim measure, SCE&G will take prompt administrative control per the requirements of Administrative Letter 98-10 to temporarily address the necessary changes.

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Document Control Desk 0-C-02-2822 RC-04-0170 Page 2 of 2

Should you have any questions, please contact Mr. Ron Clary at (803) 345-4757.

Very truly yours,

Jeffrey B. Archie

AMM/JBA/mb

Enclosures

c: N. O. Lorick

N. S. Carns

T. G. Eppink

R. J. White

W. D. Travers

K. R. Cotton

NRC Resident Inspector

K. M. Sutton

NSRC

RTS (0-C-04-2135)

File (818.23)

DMS (RC-04-0170)